U.S. Department of Transportation

National Highway Traffic Safety Administration

ODI RESUME

OFFICE OF DEFECTS INVESTIGATION

NHTSA

Authentic US Government Information
National Highway Traffic Safety Administration
uses a *digital certificate* to ensure
the content has remained unchanged

Investigation: PE 12-013
Date Opened: 06/04/2012 **Date Closed:** 09/13/2012
Investigator: Derek Rinehardt **Reviewer:** Jeff Quandt
Approver: Frank Borris
Subject: Rear Suspension Arm Assembly Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: TOYOTA MOTOR CORPORATION
Products: MY 2006 through 2011 Toyota RAV4
Population: 762,489

Problem Description: The left or right Rear Suspension Arm No.1 Assembly may fail due to corrosion, which could result in loss of vehicle control.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	10	123	131**
Crashes/Fires:	0	9	9
Injury Incidents:	0	3	3
Number of Injuries:	0	3	3
Fatality Incidents:	0	0	0
Other*:	0	339	339

***Description of Other:** Warranty claims

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation is closed. Recall 12V-373.

Summary:

In a letter dated August 1, 2012 Toyota Motor Engineering & Manufacturing North America, Inc. (Toyota) submitted a Defect Information Report (NHTSA Recall No. 12V-373) to the NHTSA identifying a safety defect regarding possible separation of the Rear Suspension Arm No. 1 Assembly ("arm") at the threaded portion (shaft and turn buckle) of the component in MY 2006 through MY 2011 Toyota RAV4 vehicles built from October 2005 through September 2010 and in MY 2010 Lexus HS250h vehicles manufactured from July 2009 through August 2010. According to Toyota, if the adjustment nuts for the rear wheel alignment are improperly tightened when alignment is performed in service, backlash may develop at the threaded portion of the arm, followed by rust formation. The threads may then wear causing the arm to separate, which may result in a loss of vehicle control.

In analysis of both Vehicle Owner Questionnaire (VOQ) data submitted to the Office of Defects Investigation (ODI) and consumer complaint data submitted to Toyota, ODI identified 131 non-duplicative reports alleging failure of the subject rear suspension arm (Note: some of the complaints and related service records refer to the arm as a rear "tie rod"). Six of the complainants allege the failure resulted in some loss of vehicle control. For purposes of this analysis, loss of control events involve alleged complete or partial departure from the intended lane of travel. An additional four complaints reported difficulty maintaining control of the vehicle when the arm failed.

Recalled vehicles will be inspected for proper torque of the adjustment nuts and replaced as necessary. In addition, Toyota will take several actions to reduce the potential for improper torque in future alignment procedures. This includes: (1) providing proper tightening sequence and torque specification information to two major wheel alignment

equipment manufacturers, who would disseminate the information to alignment shops using their equipment; (2) installation of a clip on each arm with an instructional label showing proper tightening sequence and torque specification (the clip must be removed to perform a wheel alignment); (3) installation of additional labels on the front and back vertical surfaces of the Rear Suspension Arm No. 2 assemblies; and (4) providing an instruction booklet to owners to place in the glove box.

This investigation is closed.